



# SEQUENCE LISTING

<120> Stanford University  
<121> Berger, Carol  
Krensky, Alan  
Buelow, Roland

<120> IMMUNOMODULATING DIMERS

<130> 28600-20200.23

<140> 08/653,294

<141> 1996-05-24

<150> US 08/222,851

<151> 1994-04-05

<150> US 07/844,716

<151> 1992-03-02

<150> US 07/755,584

<151> 1991-09-03

<150> US 07/672,147

<151> 1991-03-19

<150> US 07/561,246

<151> 1990-07-30

<150> US 07/008,846

<151> 1987-01-30

<160> 42

<170> FastSEQ for Windows Version 4.0

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<211> 10

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<213> Human

<220>

<221> VARIANT

<222> (1)... (10)

<223> Xaa<sup>76</sup> = E or V;

Xaa<sup>77</sup> = D, S or N;

Xaa<sup>79</sup> = R or G;

Xaa<sup>80</sup> = I or N;

Xaa<sup>81</sup> is a hydrophobic or small amino acid;

Xaa<sup>82</sup> = R or L;

Xaa<sup>83</sup> = G or R;

Xaa<sup>84</sup> = is a hydrophobic or small amino acid.

<400> 1

Arg Xaa<sup>76</sup> Xaa<sup>77</sup> Leu Xaa<sup>79</sup> Xaa<sup>80</sup> Xaa<sup>81</sup> Xaa<sup>82</sup> Xaa<sup>83</sup> Xaa<sup>84</sup>

1

5

10



Arg Ile Leu Leu Arg Tyr  
1 5

<210> 6  
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<212> PRT  
<213> Human

<400> 6  
Tyr Arg Leu Leu Ile Arg  
1 5

<210> 7  
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<400> 7  
Tyr Arg Leu Ala Ile Arg  
1 5

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Arg Glu Asn Leu Arg Ile Ala Leu Arg Tyr  
1 5 10

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<400> 9  
Tyr Arg Leu Ala Ile Arg Leu Asn Glu Arg  
1 5 10

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Arg Glu Asn Leu Arg Ile Leu Leu Arg Tyr  
1 5 10

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Tyr Arg Leu Leu Ile Arg Leu Asn Glu Arg  
1 5 10

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Arg Glu Asp Leu Arg Ile Ala Leu Arg Tyr  
1 5 10

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<400> 13  
Tyr Arg Leu Ala Ile Arg Leu Asp Glu Arg  
1 5 10

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<400> 14  
Arg Glu Asp Leu Arg Ile Leu Leu Arg Tyr  
1 5 10

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1 5 10

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Tyr Arg Leu Leu Ile Arg Arg Ile Leu Leu Arg Tyr  
1 5 10

<210> 17  
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<400> 17  
Tyr Arg Leu Leu Ile Arg Arg Ile Ala Leu Arg Tyr  
1 5 10

<210> 18  
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<400> 18

Tyr Arg Leu Ala Ile Arg Arg Ile Leu Leu Arg Tyr  
1 5 10

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<223> Xaa = D-Arginine

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Tyr Arg Leu Ala Ile Xaa Arg Ile Ala Leu Arg Tyr  
1 5 10

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<221> VARIANT

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<223> Xaa = D-Isoleucin

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Tyr Arg Leu Ala Ile Arg Ile Xaa Arg Ile Leu Leu Arg Tyr  
1 5 10

<210> 21

<211> 15

<212> PRT

<213> Human

<400> 21

Ala Tyr Arg Leu Leu Ile Lys Val Ile Arg Ile Val Leu Lys Tyr  
1 5 10 15

<210> 22

<211> 17

<212> PRT

<213> Human

<400> 22

Ser Tyr Lys Leu Val Ile Lys Ile Asn Asn Ile Arg Ile Val Val Lys  
1 5 10 15  
Phe

<210> 23

<211> 10

<212> PRT

<213> Human

<400> 23

Arg Glu Asp Leu Arg Thr Leu Leu Arg Tyr  
1 5 10

<210> 24

<211> 10

<212> PRT

<213> Human

<400> 24

Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr  
1 5 10

<210> 25

<211> 10

<212> PRT

<213> Human

<400> 25

Arg Glu Asn Leu Arg Thr Ala Leu Arg Tyr  
1 5 10

<210> 26

<211> 20

<212> PRT

<213> Human

<400> 26

Tyr Arg Leu Ala Ile Arg Leu Asn Glu Arg Arg Glu Asn Leu Arg Ile  
1 5 10 15  
Ala Leu Arg Tyr  
20

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<400> 27

Tyr Gly Arg Leu Asn Arg Leu Ser Glu Arg Arg Glu Ser Leu Arg Asn  
1 5 10 15  
Leu Arg Gly Tyr  
20

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<212> PRT

<213> Human

<400> 28

Tyr Arg Leu Ala Thr Arg Leu Asn Glu Arg Arg Glu Asn Leu Arg Ile  
1 5 10 15  
Ala Leu Arg Tyr  
20

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<213> Human

<400> 29  
Tyr Arg Leu Ala Ile Arg Leu Asn Glu Arg Arg Glu Asn Leu Arg Thr  
1 5 10 15  
Ala Leu Arg Tyr  
20

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<213> Human

<400> 30  
Tyr Arg Leu Ala Thr Arg Leu Asn Glu Arg Arg Glu Asn Leu Arg Thr  
1 5 10 15  
Ala Leu Arg Tyr  
20

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<213> Human

<400> 31  
Tyr Arg Leu Ala Ile Arg Leu Asn Glu Arg Tyr Arg Leu Ala Ile Arg  
1 5 10 15  
Leu Asn Glu Arg  
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<210> 32  
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<213> Human

<400> 32  
Trp Asp Arg Glu Thr Gln Ile Cys Lys Ala Lys Ala Gln Thr Asp Arg  
1 5 10 15  
Glu Asn Leu Arg Ile Ala Leu Arg Tyr  
20 25

<210> 33  
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<212> PRT  
<213> Human

<400> 33  
Lys Ala Gln Thr Asp Arg Glu Asn Leu Arg Ile Ala Leu Arg Tyr  
1 5 10 15

<210> 34  
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<213> Human

<400> 34

Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr  
1 5 10

<210> 35

<211> 20

<212> PRT

<213> Human

<400> 35

Tyr Gly Arg Leu Asn Arg Leu Ser Glu Arg Arg Glu Ser Leu Arg Asn  
1 5 10 15

Leu Arg Gly Tyr  
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<210> 36

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<400> 36

Tyr Arg Leu Ala Ile Arg Arg Ile Ala Leu Arg Tyr  
1 5 10

<210> 37

<211> 10

<212> PRT

<213> Human

<400> 37

Arg Val Asp Leu Arg Thr Leu Arg Gly Tyr  
1 5 10

<210> 38

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<221> VARIANT

<222> (1)...(10)

<223> Xaa<sup>77</sup> = D,S or N;  
Xaa<sup>80</sup> = I or N;  
Xaa<sup>81</sup> = A or L;  
Xaa<sup>82</sup> = R or L;  
Xaa<sup>83</sup> = G or R.

<400> 38

Arg Glu Xaa<sup>77</sup> Leu Arg Xaa<sup>80</sup> Xaa<sup>81</sup> Xaa<sup>82</sup> Xaa<sup>83</sup> Tyr  
1 5 10

<210> 39

<211> 10

<212> PRT

<213> Human



<220>  
 <221> VARIANT  
 <222> (1) ... (10)  
 <223> Xaa<sup>77</sup> = D, S or N;  
           Xaa<sup>80</sup> = I or N;  
           Xaa<sup>81</sup> = A or L;  
           Xaa<sup>82</sup> = R or L;  
           Xaa<sup>83</sup> = G or R.

<400> 39  
 Tyr Xaa<sup>83</sup> Xaa<sup>82</sup> Xaa<sup>81</sup> Xaa<sup>80</sup> Arg Leu Xaa<sup>77</sup> Glu Arg  
       1                              5                              10

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 Arg Ile Ala Leu Arg Tyr Tyr Arg Leu Ala Ile Arg  
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<400> 41  
 Arg Ile Ala Leu Arg Tyr Arg Ile Leu Leu Arg Tyr  
       1                              5                              10

<210> 42  
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<400> 42  
 Tyr Arg Leu Leu Ile Arg Tyr Arg Leu Ala Ile Arg  
       1                              5                              10